IN THE CLAIMS:

1. (Currently Amended) A storage system comprising:

a channel unit that transfers data sent from an upper-level system and transfers data to said upper-level system;

a plurality of cache ~~unit~~ units which ~~is~~ are coupled to said channel unit and in which data sent from said channel unit is stored;

a plurality of control units that ~~is~~ are coupled to said plurality of cache ~~unit~~ units, and transfers or receives data to or from said plurality of cache ~~unit~~ units;

a disk device that stores data written under control of each of said plurality of control units;

a plurality of paths, a first one of said paths coupling a first one of said cache ~~unit~~ units to a first one of said control units, a second one of said paths coupling said first one of said cache ~~unit~~ units to a second one of said control units, a third one of said paths coupling said first one of said cache ~~unit~~ units to said channel unit;

at least one first processor for controlling transfer to and from the plurality of cache ~~unit~~ units of data which is transferred from said upper-level system and received at and transferred from said channel unit; and

at least one second processor for controlling said plurality of cache ~~unit~~ units to transfer data to said disk device, wherein

the channel unit, the plurality of cache units and the plurality of control units are included in a disk controller,

said third one of said paths not intersecting with said first one of said paths or said second one of said paths, except for at an end point connecting said third one of said paths to said first one of said cache ~~unit~~ units.

2. (Canceled)

3. (Previously Presented) A storage system according to claim 1, wherein said first one of said paths and said second one of said paths are independent of each other.

4. (Currently Amended) A storage system according to claim 1, wherein said first one of said paths is dedicated to communication between said first control unit and said first cache unit.

5. (Currently Amended) A storage system according to claim 4, wherein said second one of said paths is dedicated to communication between said second control unit and said first cache unit.

6. (Currently Amended) A storage system according to claim 1, wherein among said plurality of paths, a path linking said first cache unit and a predetermined control unit included in said plurality of control units is not the same as a path linking said first cache unit and an other control unit included in said plurality of control units.

7. (Currently Amended) A storage system according to claim 1, wherein said first one of said paths directly links said first control unit to said first cache unit.

8. (Currently Amended) A storage system according to claim 7, wherein said second one of said paths directly links said second control unit to said first cache unit.

9. (Currently Amended) A storage system according to claim 1, wherein said first one of said paths links said first control unit and said first cache unit on a point-to-point basis.

10. (Currently Amended) A storage system according to claim 9, wherein said second one of said paths links said second control unit to said first cache unit on a point-to-point basis.

11. (Currently Amended) A storage system according to claim 1, wherein said disk drive includes a plurality of disk drives, and said plurality of control units ~~is~~ are connected to said plurality of disk drives.

12. (Currently Amended) A storage system according to claim 1, wherein said plurality of paths are signal lines linking said plurality of cache ~~unit~~ units and said plurality of control units.

13. (Currently Amended) A storage system according to claim 1, wherein said plurality of paths are used to write data, of which writing is requested by said upper-level system, from said plurality of cache ~~unit~~ units to said disk device, and used to communicate data, of which writing is requested by said upper-level system, from said plurality of cache ~~unit~~ units to said plurality of control units.

14. (Currently Amended) A storage system according to claim 1, wherein said plurality of paths are used to read data, of which reading is requested by said upper-level system, from said disk drive, and are used to communicate data, of which reading is requested by said upper-level system, from said control unit to said plurality of cache ~~unit~~ units.

15. (Currently Amended) A storage system according to claim 1, wherein data received at the channel unit from said upper-level system is transferred to said plurality of cache ~~unit~~ units under control of said first at least one processor.

16. (Previously Presented) A storage system according to claim 1, wherein said at least one second processor controls transfer of data to said control units from said disk drive.

17. (Currently Amended) A storage system according to claim 16, wherein data received at one of said control units is transferred to said plurality of cache ~~unit~~ units under control of said at least one second processor.

18. (Currently Amended) A storage system according to claim 17, wherein data received at the plurality of cache ~~unit~~ units from one of said control units is transferred to said channel unit in response to a command from said upper-level system.